Technology Leadership
for Digital Cinema

S2H-30

User Manual

Version 1.3

Compliant with S2H-30 Firmware version 1.6.0
and S2H-30 Doremi Universal Interface Software 4.2.3

Table Of Contents

1 Introduction 8
1.1 Purpose 8
1.2 Software Version 8
1.3 Contact Information 8
2 S2H-30 Overview 9
2.1 S2H-30 Description 9
2.1.1 S2H-30 Top View 9
2.1.2 S2H-30 Front Panel 9
2.1.3 S2H-30 Rear Panel 10
2.2 Supported Formats 11
3 S2H-30 OSD Menu System Overview 12
3.1 Input Menu 12
3.2 Output Menu 13
3.2.1 Color Space 14
3.3 Image Menu 15
3.4 Sync Menu 16
3.5 Audio Menu 17
3.5.1 Supported Audio Sample Rates 17
3.6 On Screen Display (OSD) Menu 18
3.7 System Menu 19
3.8 Status Menu 19
4 Infrared Remote Controller 20
4.1 Remote Controller Overview 20
4.2 Remote Controller Functions 21
4.3 Input Source Setting 22
4.3.1 HDMI/DVI Output Format 22
4.3.2 Setting the IR Channel 23
5 Doremi Universal Interface Software (DUIS) 24
5.1 DUIS Installation 24
5.2 Doremi Universal Interface Software Overview 27
5.3 Settings Field 28
5.4 Tabs Description 30
5.4.1 Input Tab 30
5.4.2 Output Tab 30
5.4.3 Image Tab 31
5.4.4 Sync I/O Tab 33
5.4.5 Audio Tab 34
5.4.6 OSD Tab 35
5.4.7 System Tab 36
6 Firmware Update 38
6.1 USB Update 38
7 Acronyms 39
8 Document Revision History 40

Software License Agreement

The software license agreement can be found at the following location:
http://www.doremilabs.com/support/proav-support/proav-warranties/

Hardware Warranty

The hardware warranty can be found at the following location:
http://www.doremilabs.com/support/proav-support/proav-warranties/

HDMI

The terms HDMI and HDMI High-Definition Multimedia Interface, and the HDMI Logo are trademarks or registered trademarks of HDMI Licensing LLC in the United States and other countries.

WARNING

THIS DEVICE MUST BE GROUNDED

IMPORTANT

Power requirements for electrical equipment vary from area to area. Please ensure that the S2H-30 meets the power requirements in the surrounding area. If in doubt, consult a qualified electrician or a Doremi Labs dealer.

S2H-30 Power Ratings

- The S2H-30 should only be used with a Doremi approved power supply.

- Power Supply Specifications:
  - AC Input: 100-240V~, 1.2A, 50-60Hz
  - Output 12V DC, 3.0A (36W Max.)
- H2S-30 Power Requirements
  - 12V DC, .12A

Protecting Yourself and the S2H-30

Never touch the AC plug with wet hands. Always disconnect the S2H-30 from the power supply by pulling on the plug, not the cord. Allow only a Doremi Labs dealer or qualified professional engineer to repair or reassemble the S2H-30. Apart from voiding the warranty, unauthorized engineers might touch live internal parts and receive a serious electric shock. Do not put, or allow anyone to put any object, especially metal objects, into the S2H-30.

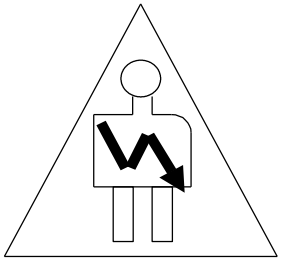
If water or any other liquid is spilled into or onto the S2H-30, disconnect the power and call a Doremi dealer. The unit must be well ventilated and away from direct sunlight. To avoid damage to internal circuitry, as well as the external finish, keep the S2H-30 away from direct sources of heat (heater vents, stoves, radiators). Avoid using flammable aerosols near the S2H-30. They can damage the surface area and may ignite. Do not use denatured alcohol, paint thinner, or similar chemicals to clean the S2H-30. This can damage the unit.

Modification of this equipment is dangerous and can result in the functions of the S2H-30 being impaired. Never attempt to modify the equipment in any way. In order to ensure optimum performance of the S2H-30, select the setup location carefully and make sure the equipment is used properly. Avoid setting up the S2H-30 in the following locations:

- In a humid or dusty environment.
- In a room with poor ventilation.
- On a surface which is not level.
- Inside a moving vehicle where it will be subject to vibration.
- In an extremely hot or cold environment.

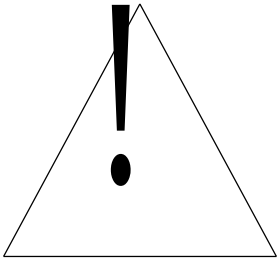
W A R N I N G !!

To prevent fire or shock hazard, do not expose this appliance to rain or moisture

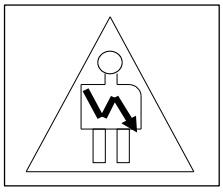


CAUTION

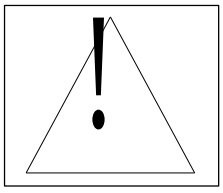
RISK OF ELECTRIC SHOCK
DO NOT OPEN



CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK,
DO NOT REMOVE COVER (OR BACK).
NO USER-SERVICEABLE PARTS INSIDE.
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



The lightning flash with the arrowhead symbol superimposed across a graphical representation of a person, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure; that may be of sufficient magnitude to constitute a risk of electric shock.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

CE NOTICE

Marking by the symbol CE indicates compliance of the device to the EMC (Electromagnetic Compatibility) directive and to the Low Voltage directive of the European Community. The marking is indicative that the device meets or exceeds the following technical standards:

- EN 55022 "Limits and Methods of Measurement of Radio Interface Characteristics of Information Technology Equipment".

- A "Declaration of Conformity" in accordance with the above standard has been made and is on file at Doremi.

1 Introduction

1.1 Purpose

This document provides guidance on how to use the S2H-30 SDI to HDMI® converter that incorporates High-Definition Multimedia Interface technology, as well as the Doremi Universal Interface Software (DUIS). It explains all features of the S2H-30 as well as the infrared remote control and lays out instructions for upgrading the firmware.

1.2 Software Version

- DUIS software version 4.2.3
- Firmware version 1.6.0

1.3 Contact Information

If in need of help or assistance, please contact Doremi Labs Technical Services at **+ 1-818-562-1101** or email at proavsupport@doremilabs.com.

2 S2H-30 Overview

2.1 S2H-30 Description

The S2H-30 is an SDI to HDMI format converter featuring SDI and HDMI connectors that allow for any SDI input to be converted to any supported HDMI output format or scan rate. It supports both SD and HD video and employs 12 bit bi-cubic interpolation to ensure the highest quality picture. It also supports 3G SDI and can tackle many conversion tasks. The S2H-30 supports up to 8 channels of Embedded Audio on HDSDI and HDMI as well as 2 channels of AES outputs.

2.1.1 S2H-30 Top View

Figure 1: S2H-30 Top View

2.1.2 S2H-30 Front Panel

The S2H-30 front panel is illustrated below:

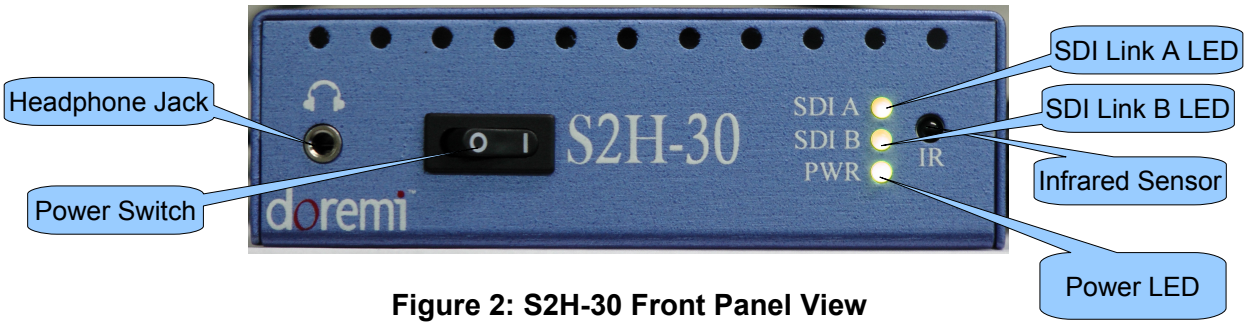


Figure 2: S2H-30 Front Panel View

2.1.3 S2H-30 Rear Panel

The S2H-30 rear panel is illustrated below:

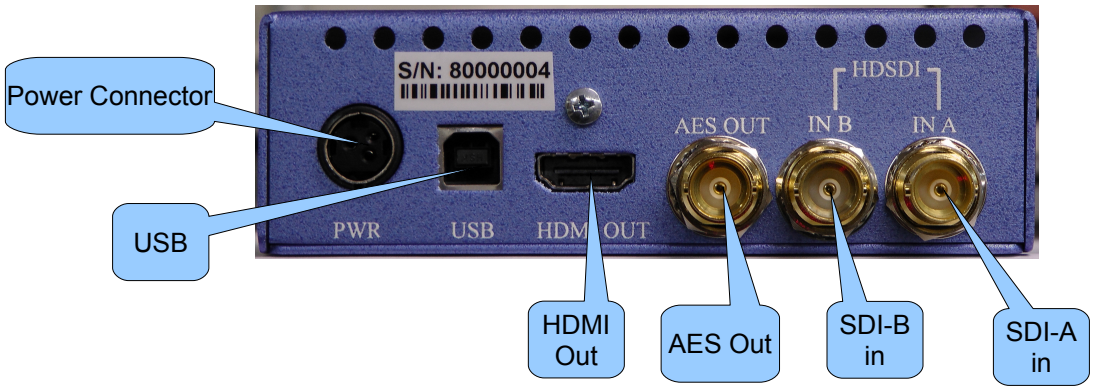


Figure 3: S2H-30 Rear Panel View

The rear panel has the following connectors:

Connector	Description
USB	USB connector
HDMI out	HDMI output connector
SDI-A in	SDI input connector – Link A
SDI-B in	SDI input connector – Link B
AES out	AES output connector
Power	Power supply connector

2.2 Supported Formats

The table below summarizes all supported inputs and outputs available on the S2H-30.

Supported Input(s)	Supported Output(s)
SD-SDI: NTSC, PAL (SMPTE 259M-C 4:3 or 16:9, SMPTE 259M-C 4:3 or 16:9) **HD-SDI**: all HD formats (SMPTE 274, SMPTE296, SMPTE372, SMPTE 424M 3G SDI, 2K).	**HDMI:** Supported output formats are listed below: 640x480 = VGA 720x480i = 480i 720x480p = 480p 720x576i = 576i 720x576p = 576p 800x600 = SVGA 1280x720 = 720p 1024x768 = XGA 1366x768 = WXGA 1280x1024 = SXGA 1400x1050 = SXGA+ 1680x1050 = WSXGA+ 1920x1080i = 1080i 1920x1080p = 1080p 1920x1200 = WUXGA

3 S2H-30 OSD Menu System Overview

The S2H-30 is configured using the IR remote control to access the menu system through the OSD (see Section 4). Or, by using the Doremi Universal Interface Software (DUIS) - see Section 5.

3.1 Input Menu

The Input menu can be used to set up the input parameters.

Sub-Menu	Value	Description
Interface	SDI Pattern	Input interface setting. Pattern produces 100% color bar patterns with 8 channels of audio. The odd channels being at 1kHz and the even channels at 2kHz.

3.2 Output Menu

The Output menu can be used to set up the output parameters. See table below for more information.

Sub-Menu	Value	Description
Interface	HDMI/DVI	The output interface is set to HDMI/DVI by default. It is the only output interface available.
HDMI/DVI color	Auto RGB RGB ext YCbCr 601 YCbCr 601 ext YCbCr 709 YCbCr 709 ext	HDMI/DVI output color setting. Auto: Usually RGB Ext: designates extended color range (full bandwidth) as opposed to limiting the color spectrum to comply with ITU standards.
DVI Resolution	Auto VGA SVGA XGA WXGA SXGA SXGA+ WSXGA+ WUXGA 480p 480i 576p 576i 720p 1080i 1080p Match input	Set the DVI output pixel resolution. Auto: In this mode, the unit will read the default resolution of the connected monitor using EDID and sets the output to match. Match Input: In this mode, the unit will set the DVI output resolution to match the input resolution – or to the closest output resolution if the exact input resolution is not available. VGA= 640x480 SVGA= 800x600 XGA= 1024x768 WXGA= 1280x800 SXGA= 1280x1024 SXGA+= 1400x1050 WSXGA+= 1680x1050 WUXGA= 1920x1200

Sub-Menu	Value	Description
DVI Frequency	23.98 24 25 29.97 30 47.95 48 50 59.94 60 Match input Match Input x2	Set the DVI output frequency. This list shows all possible frequencies but the S2H-30 menu will only show the allowed frequencies for the DVI output format selected. Match Input: In this mode, the unit will set the DVI output frequency to match the input frequency. Match Input x2: Match input x2 will output twice the input frame rate. e.g. Input= 1080p 30; Output= 1080p 60
Time Code	Off Bypass SDI Free wheel	Set the embedded Time code mode. Off: No embedded timecode on HDMI output. Bypass SDI: Pass the embeded timecode from the SDI input to the HDMI output. Free wheel: Generate embedded Time Code starting at the moment this option is enabled.

3.2.1 Color Space

The ITU-R BT.709-5 (HD formats) and ITU-R BT.601-5 (SD formats) standards define the range of color values in a digital signal to be:

- 16 to 240 for 8bit coding
- 64 to 960 for 10bit coding

The S2H-30 color space conversion supports these standards, but it also supports full range by allowing the color values to be between:

- 0 to 255 for 8bit coding
- 0 to 1023 for 10bit coding

On the S2H-30, the full range modes are designated by the “ext” following the color space conversion mode.

3.3 Image Menu

The Image menu can be used to set up the image parameters.

Sub-Menu	Value	Description
Brightness	0% to 100%	Brightness value setting
Contrast	0% to 100%	Contrast value setting
Scaling	Aspect Ratio Fill Aspect Fit H Aspect Fit V One to One	Scaling value setting Aspect Ratio: Maintain input aspect ratio. Fill: Scale to fill the output resolution. Aspect Fit H (V): Scale Horizontally (Vertically) to fill the output resolution. One to One: No Scaling.
De-interlacing	Off On Motion	Set the De-interlacing mode. Motion: De-interlacing is based on motion.
SD Ratio	4:3 Digital 16:9 Digital 4:3 Analog 16:9 Analog	Define the source PAR for SD formats. For source PAR of 8:9 or 16:15 use 4:3 Digital or 16:9 Digital. For source PAR of 10:11 or 59:54 use 4:3 Analog or 16:9 Analog.

3.4 Sync Menu

The Sync menu can be used to set up the sync parameters.

Sub-Menu	Value	Description
Input	SDI	Sync input is set to SDI by default. It is the only option available.
H offset	X pixels	Horizontal Sync offset in pixels
V offset	X lines	Vertical Sync offset in lines

3.5 Audio Menu

The Audio menu can be used to set up the audio parameters.

Sub-Menu	Value	Description
Input	SDI	Audio input is set to SDI by default. It is the only input interface available.
Delay	X frames	Audio delay setting from -1 to +2 frames.
Level	-18, -12, -6, 0, +6, +12, +18 dB	Audio Output level setting.
Swap Channels 3 and 4		When selected input channel 3 will be output on channel 4 and input channel 4 will be output on channel 3.
HDMI Channel Out	Auto 2 4 6 8 Off	Set the HDMI audio output mode. Auto: All audio inputs will be present on the HDMI output. 2, 4, 6, 8: Total number of audio channels to be present on the HDMI output. Off: No audio on HDMI output.

3.5.1 Supported Audio Sample Rates

- HDMI Output: 48 kHz
- SDI Input: 48 kHz

Note: The S2H-30 does not support audio sample rate conversions. If using audio on the HDMI input, the sample rate must be 48kHz. Using unsupported audio sample rates will result in degraded audio output.

3.6 On Screen Display (OSD) Menu

The OSD menu can be used to set up the OSD parameters.

Sub-Menu	Value	Description
OSD Enable	Yes No	Enable or disable On Screen Display.
OSD timeout	X s (seconds)	On Screen Display timeout in seconds. Set to Infinite to keep it always on.
OSD H Position	Position Bar	OSD horizontal position in percentage.
OSD V position	Position Bar	OSD vertical position in percentage.
OSD Status The OSD Status will show the burn-in window timecode, I/O status and audio levels when the menu OSD is not active.	Off TC BIW Input Status Output Status	Burn In Window and Status display Off: BIW and Status not displayed TC BIW: Timecode is shown in a burn-in window on the S2H-30 output Input Status: In addition to the BIW timecode, the S2H-30 output will display the Input Status including Audio levels, Closed Caption presence, Input Format and CRC errors (flashing red dot). Output Status: In addition to the BIW timecode, the S2H-30 output will display the Output Status.
TC Color	White/Black W/B Zoom Black/White B/W Zoom	Burn In Window type setting.

3.7 System Menu

The System menu allows access to the system parameters.

Sub-Menu	Description
Save	Save current settings to flash. Select to Save, when the “?” appears select again to confirm.
Firmware: x.y	Firmware version
Serial: zzzzzzz	Serial number
License: uuuuuuuu	License number
Temp: vv C	Temperature (in degree Celsius)
Standby	Standby mode. Puts the unit in Power Down mode.
Auto Standby	Auto Standby mode. Sets the idle time duration before the unit goes in power down mode automatically.
IR	Infra-Red. To avoid IR interference with multiple S2H-30 units, assign each a different IR code from 0x0 to 0xF (16 total) default is 0. Set the DIP switch on the Doremi IR remote accordingly.

3.8 Status Menu

The Status menu can be used to view the Input and Output status.

Sub-Menu	Description
In: Out:	Input and Output format status information.

4 Infrared Remote Controller

The Menu System can be accessed using the IR controller in conjunction with the OSD. Pressing the Menu button will invoke the menu system. The Left arrow, Right arrow, Select and Exit buttons can be used to navigate the OSD menu selections and set up the S2H-30.

4.1 Remote Controller Overview

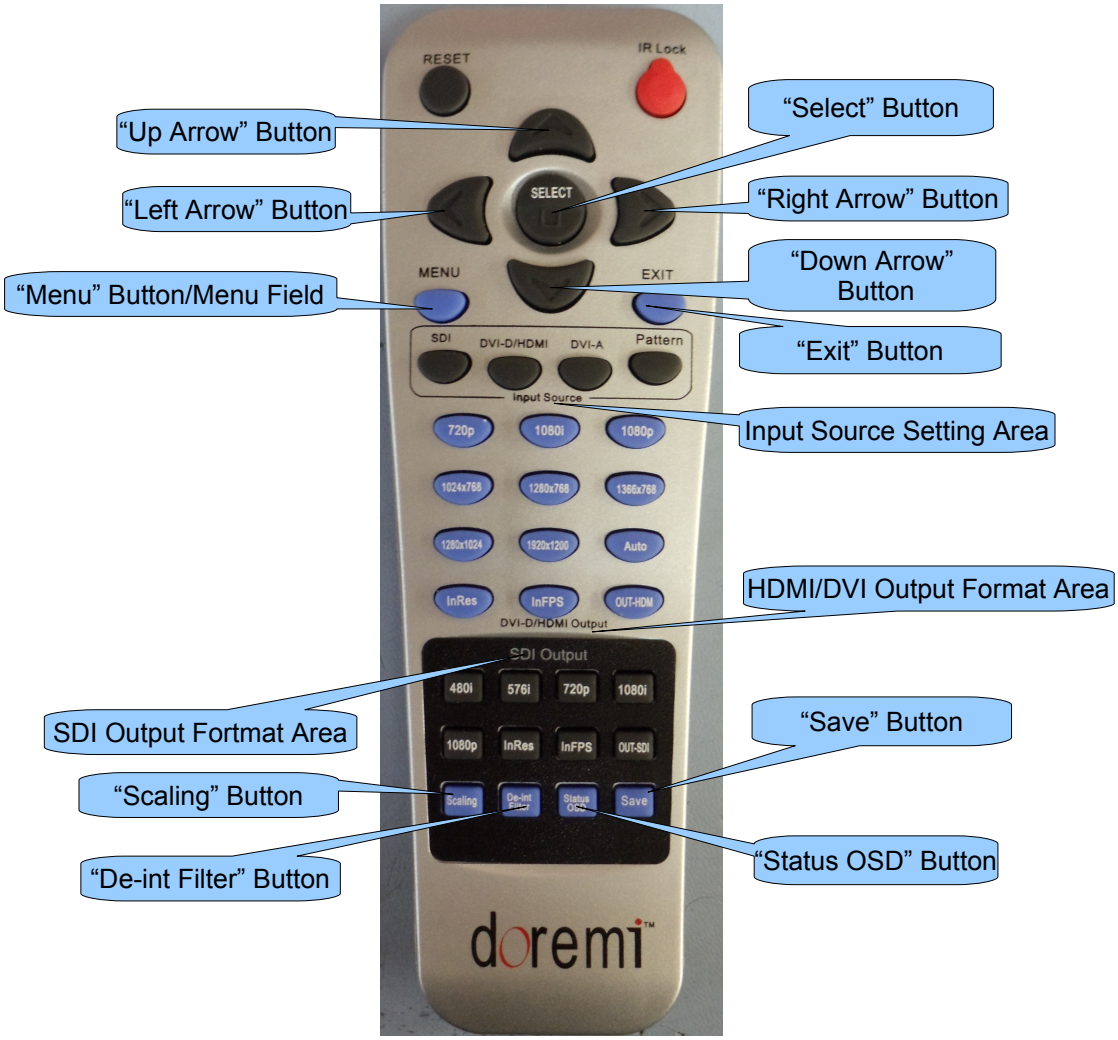


Figure 4: Infrared Remote Controller

- The remote controller is divided into four different areas:
- Input Source Setting
- Navigation or Menu System
- HDMI/DVI Output Format
- SDI Output Format (unused with S2H-30)

4.2 Remote Controller Functions

Remote Control	Function
Input source selection	Select SDI or Pattern **Note**: The DVI-D/HDMI and DVI-A buttons are unused.
“IR lock” button	Unused
“Reset” button	Unused
“Menu” button	Invoke the Menu System
“Exit” button	Back one menu level
HDMI Output format area	Force the DVI-D output to: OUT-HDM: Forces the main output to DVI/HDMI HDMI output: 1080i 1080p 1024x768 1280x768 1366x768 1280x1024 1920x1200 Auto InRes InFps More formats are available through the menu system
“Up Arrow” button	Unused
“Down Arrow” button	Unused
“Left Arrow” button	Navigate OSD left
“Right Arrow” button	Navigate OSD right
“Select” button	Ok/Select
Scaling	Cycles through the image settings
De-Int Filter	Cycles through the available De-int Filter settings
Status OSD	Cycles through the OSD status options
Save	Saves the current settings to flash

4.3 Input Source Setting

- To select the Input Source, press one of the buttons available in the Input Source field (see Figure 5).

Figure 5: Input Source Setting

- The user has the choice between SDI and Pattern. The Pattern button will generate color bars with 8 channels of audio at different frequencies (see Figure 5).

Note: The DVI-D/HDMI and DVI-A buttons are unused.

4.3.1 HDMI/DVI Output Format

- To set the Output Format to a specific HDMI/DVI format, press “OUT-HDM” on the IR controller (see Figure 4).
- Then, press the corresponding Output Format: 720p, 1080i, 1080p, 1024x768, 1280x768, 1366x768, 1280x1024, 1920x1200, Auto, InRes, INFPS (more formats are available through the menu system). See Figure 6 for more information.

Figure 6: HDMI/DVI Output Format Setting

4.3.2 Setting the IR Channel

When using multiple S2H-30 units, you can avoid interference by pairing each unit to an individual remote. Assign each S2H-30 a different IR code from 0x0 to 0xF (16 total), and set the dip-switches on the Doremi IR remote accordingly.

- Using the OSD or the DUIS software, set the IR channel to the desired setting between the hex values 0x0 and 0xF.
- Remove the battery cover on the rear of the IR remote and set the four dip-switches below the battery bay to the corresponding value.

Note: The 4 dip-switches represent the binary values 1, 2, 4, 8 (from left to right).

- **Example:**
  - If using IR channel 6, set the dip-switches 2 and 3 to the high position.

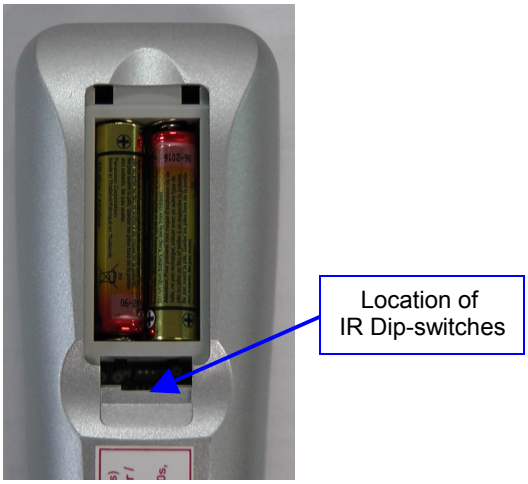


Figure 7: IR Channel Dip-Switches

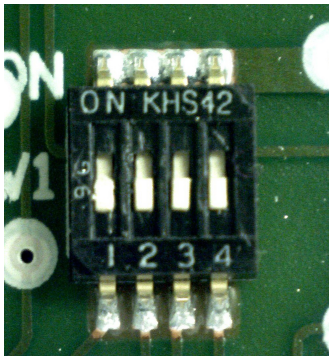


Figure 8: IR Channel Dip-Switches Close Up

5 Doremi Universal Interface Software (DUIS)

5.1 DUIS Installation

- To install the Doremi Universal Interface Software, follow the steps below:
- Plug the USB cable between the S2H-30 and an available USB port on a computer.
- If the "Found New Hardware Wizard" window appears click “Cancel”.
- Run the installation package by double-clicking on the file “Doremi_Universal_Interface_Software-4.2.2.0.exe,” which can be downloaded from: http://www.doremilabs.com/
- After the installation is over, the "Found New Hardware Wizard" will appear:

Note: For Windows 7 users, the "Found New Hardware Wizard" will not appear.

- Go through all the steps shown below:
- Select the “No, not this time” option and then click “Next >” (see Figure 9).

Found New Hardware Wizard
Welcome to the Found New Hardware Wizard
Windows will search for current and updated software by looking on your computer, on the hardware installation CD, or on the Windows Update Web site (with your permission).
Read our privacy policy
Can Windows connect to Windows Update to search for software?
Yes, this time only
Yes, now and every time I connect a device
No, not this time
Click Next to continue.
< Back
Next >
Cancel

Figure 9: ”Found New Hardware Wizard” Window Step 1

- When asked for the type of software installation, choose the option “Install the software automatically (recommended).” See Figure 10 for more information.

Found New Hardware Wizard
This wizard helps you install software for:
Doremi GhX Board
If your hardware came with an installation CD or floppy disk, insert it now.
What do you want the wizard to do?
Install the software automatically (Recommended)
Install from a list or specific location (Advanced)
Click Next to continue.
< Back
Next >
Cancel

Figure 10: ”Found New Hardware Wizard” Window Step 2

- When the driver installation is complete, click on the “Finish” button (see Figure 11).

Figure 11: ”Found New Hardware Wizard” Window Last Step

- Run the DUIS and verify that there is a proper connection.
- If the "Hardware Installation" warning window appears, click on the “Continue Anyway” button (see Figure 12 & 13).

Hardware Installation
The software you are installing for this hardware:
Doremi GHX Board
has not passed Windows Logo testing to verify its compatibility with Windows XP. (Tell me why this testing is important.)
Continuing your installation of this software may impair or destabilize the correct operation of your system either immediately or in the future. Microsoft strongly recommends that you stop this installation now and contact the hardware vendor for software that has passed Windows Logo testing.
Continue Anyway
STOP Installation

Figure 12: Hardware Installation Warning Window

Windows Security
Windows can't verify the publisher of this driver software
Don't install this driver software
You should check your manufacturer's website for updated driver software for your device.
Install this driver software anyway
Only install driver software obtained from your manufacturer's website or disc. Unsigned software from other sources may harm your computer or steal information.
See details

Figure 13: Hardware Installation Warning Window for Windows 7

5.2 Doremi Universal Interface Software Overview

The Doremi Universal Interface Software can control one or more S2H-30 devices connected to a workstation through a USB.

- When starting the DUIS, the following window will appear:

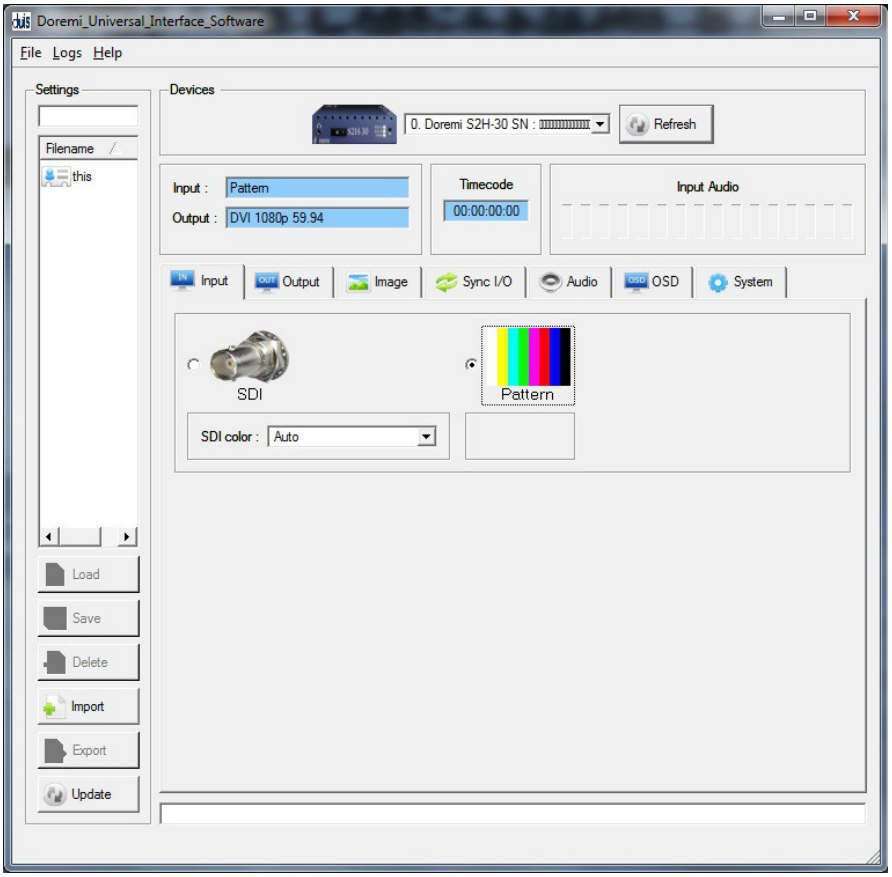


Figure 14: S2H-30 Control Panel Window Input Tab

- The DUIS is composed of the following parts:
- The “Devices” field located on the top of the window can be used to select a connected S2H-30 from the drop down menu. Click on the “Refresh” button to see if all the connected S2H-30 units are visible (see Figure 14).
- The “Information” field located just below the “Devices” field provides information about the input, output, current 'timecode", and the audio input level of the connected S2H-30 device (see Figure 14).
- The “Control” field located below the "Information" field has tabs that can be used to view or modify various settings on the connected S2H-30 unit. These settings include Input, Output, Image, Sync I/O, Audio, OSD, and System. These tabs are presented in Section 5.4 (see Figure 14).

- The “Settings” field located on the left part of the screen allows the user to manage the settings files. The “Settings” field is presented in Section 5.3 .

5.3 Settings Field

The “Settings” field can be used to manage the settings files.

- To save the current S2H-30 configuration settings into a file, enter a settings "filename" into the “Settings” text box in the top left corner and then click on the “Save” button.
- The saved settings file will appear in the “Settings” field.

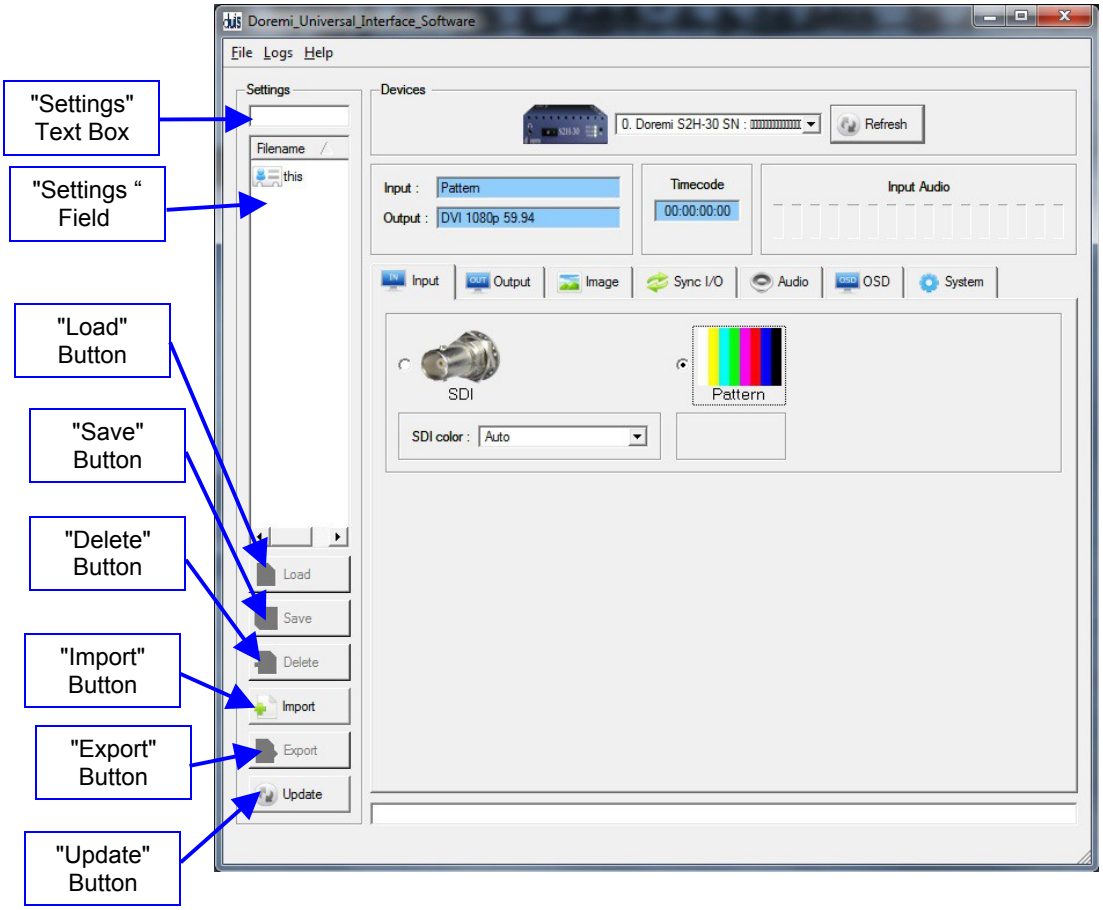


Figure 15: S2H-30 Control Panel Window Settings Field

- To export the saved settings file to a specified location, select it in the “Settings” field and click on the “Export” button. The user will be asked to confirm where to export the file using a standard “Save as” dialog box (see Figure 15).
- To import an existing settings file from a .ghx file into the “Settings” field, click on the “Import” button. Browse the files to select the appropriate “settings file” to import (see Figure 15).
- The imported file will appear in the “Settings” field on the left part of the window. To apply the settings to the connected S2H-30 unit, select the file and click on the “Load” button. The S2H-30 settings will be updated (see Figure 15).

- To delete a settings file present in the “Settings files” area, select it and click on the “Delete” button (see Figure 15).
- To update the “Settings” field to reflect the content of the “User Settings” folder of the S2H-30 Control Panel application (folder where all the settings files are stored), click on the “Update” button (see Figure 15).

Note: The "Load," "Save," "Delete," "Import," "Export," and "Update" buttons become enabled when the user selects the file from the "Settings" field (see Figure 15).

5.4 Tabs Description

5.4.1 Input Tab

The Input tab is illustrated in Figure 14 and Figure 15. All parameters are explained earlier in this manual in Section 3.1.

5.4.2 Output Tab

The Output tab is illustrated below in Figure 16.

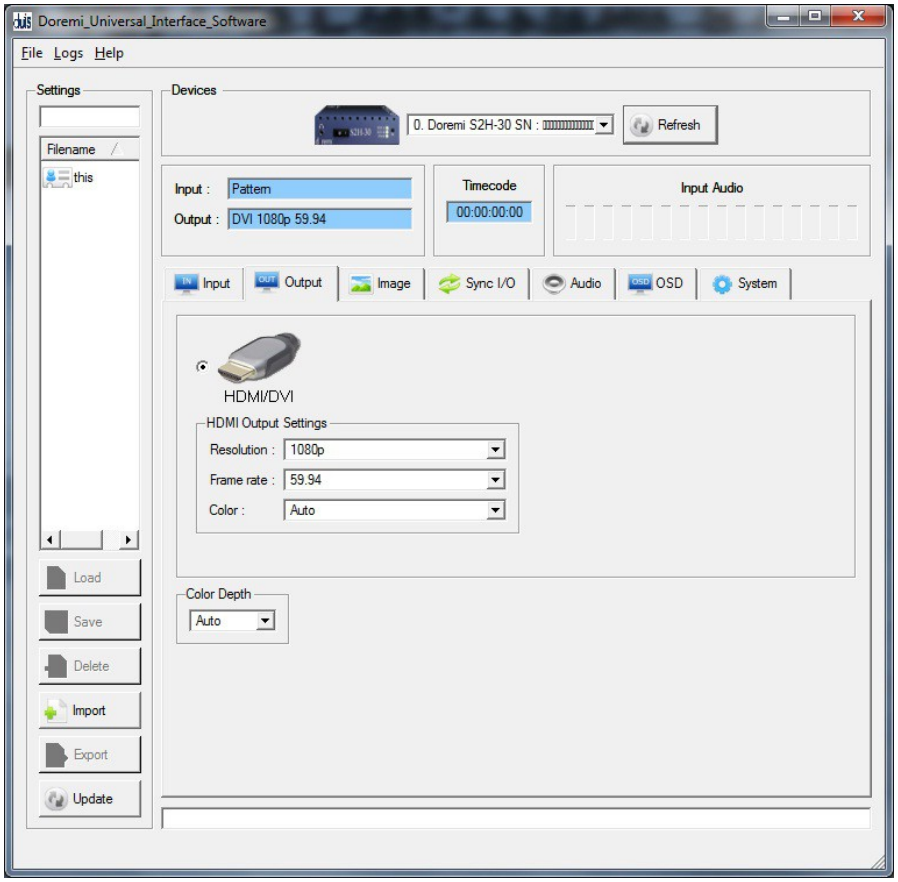


Figure 16: S2H-30 Control Panel Output Tab

All parameters are explained earlier in this manual in Section 3.2.

5.4.3 Image Tab

The Image tab is illustrated below in Figure 17.

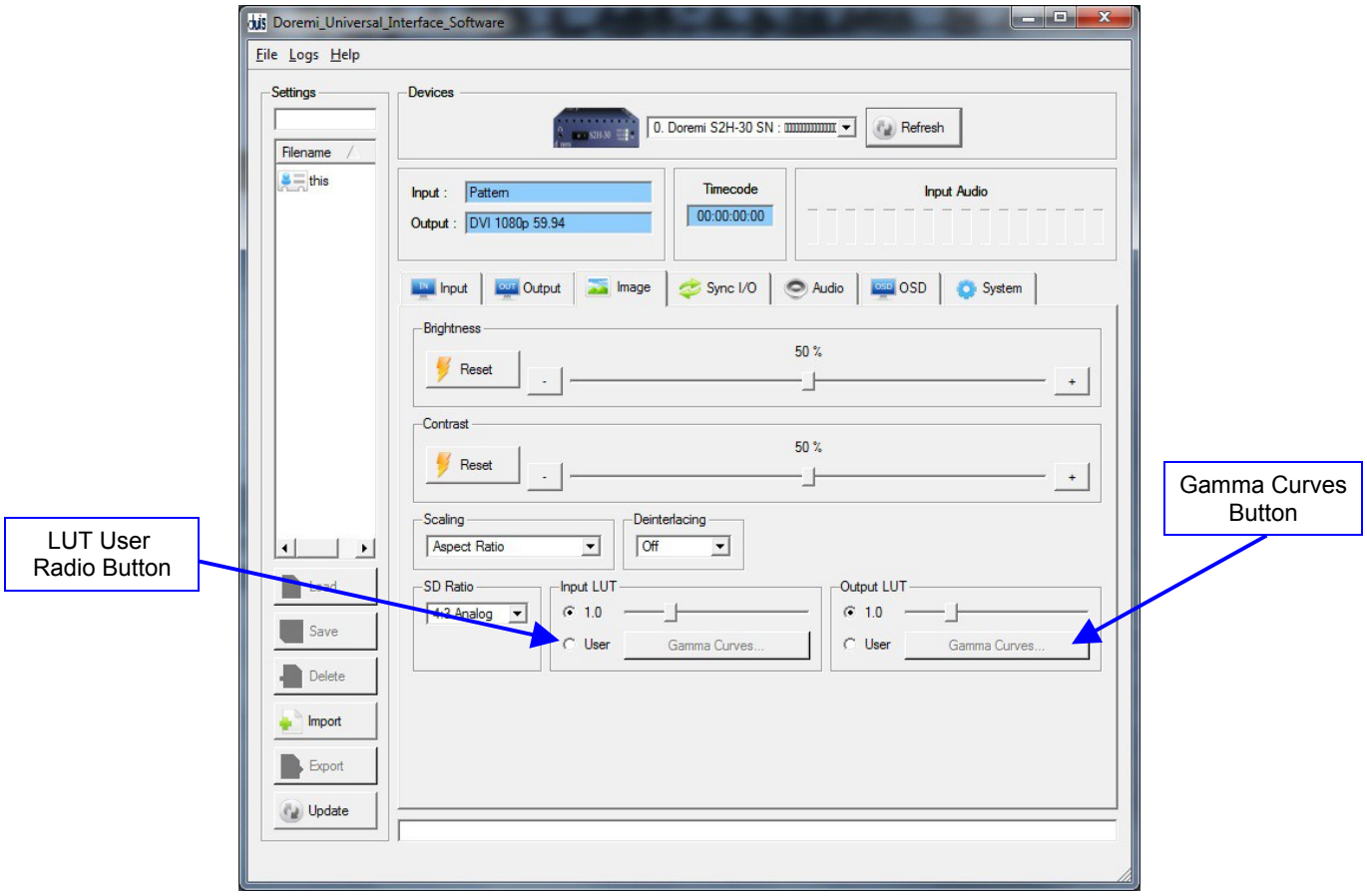


Figure 17: S2H-30 Control Panel Image Tab

All parameters are explained earlier in this manual in Section 3.3.

- To define either an Input or Output Gamma Curve, click the corresponding “User” radio button and then press the “Gamma Curves...” button.
- From the Gamma Correction pop-up window (see Figure 18), you can adjust the Gamma Curves by “Formula” by adjusting the slider bars in the “Formula Editing” section or by loading a file.
- To load a file, select the “File” radio button in the “Gamma Curves Source” section and then press the “All Colors LUT..” button and browse for the appropriate file.

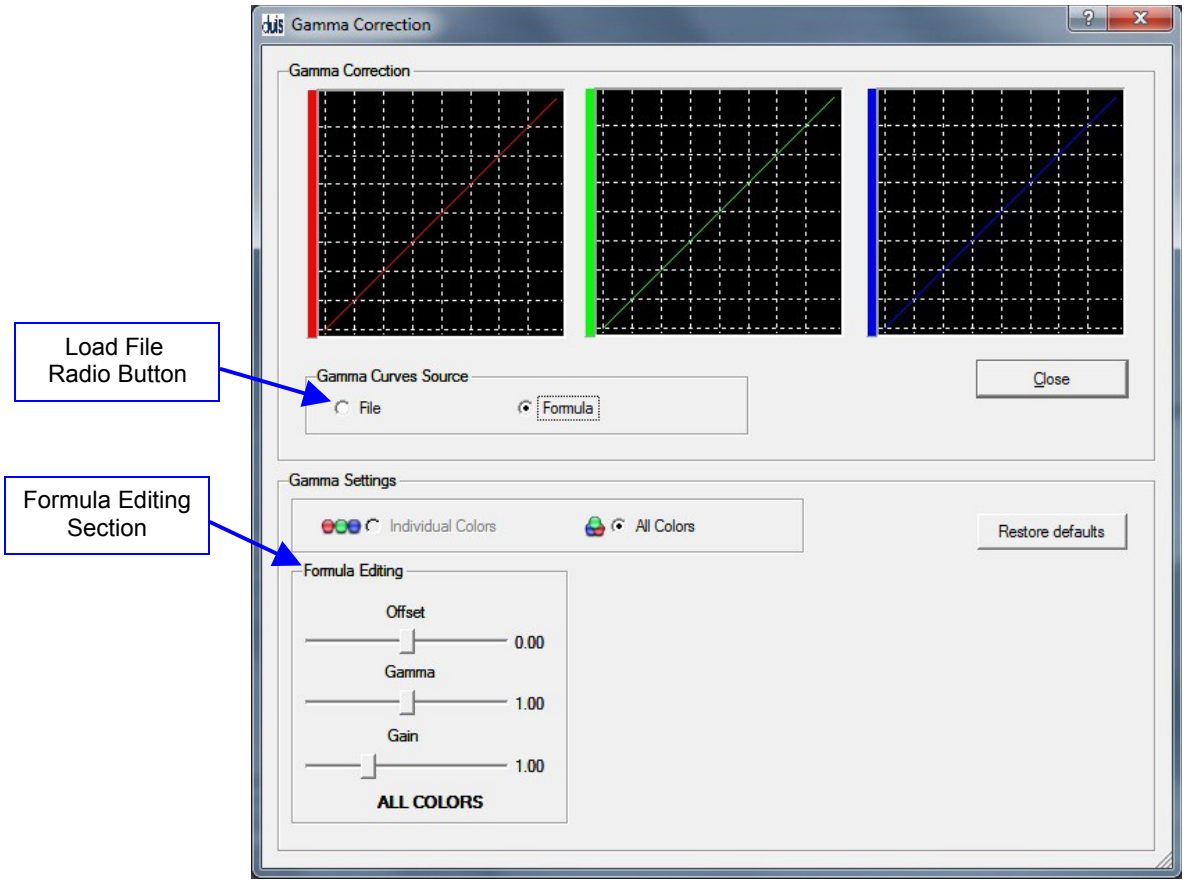


Figure 18: Gamma Correction Pop-Up Window

5.4.4 Sync I/O Tab

The Sync I/O tab is illustrated below in Figure 19.

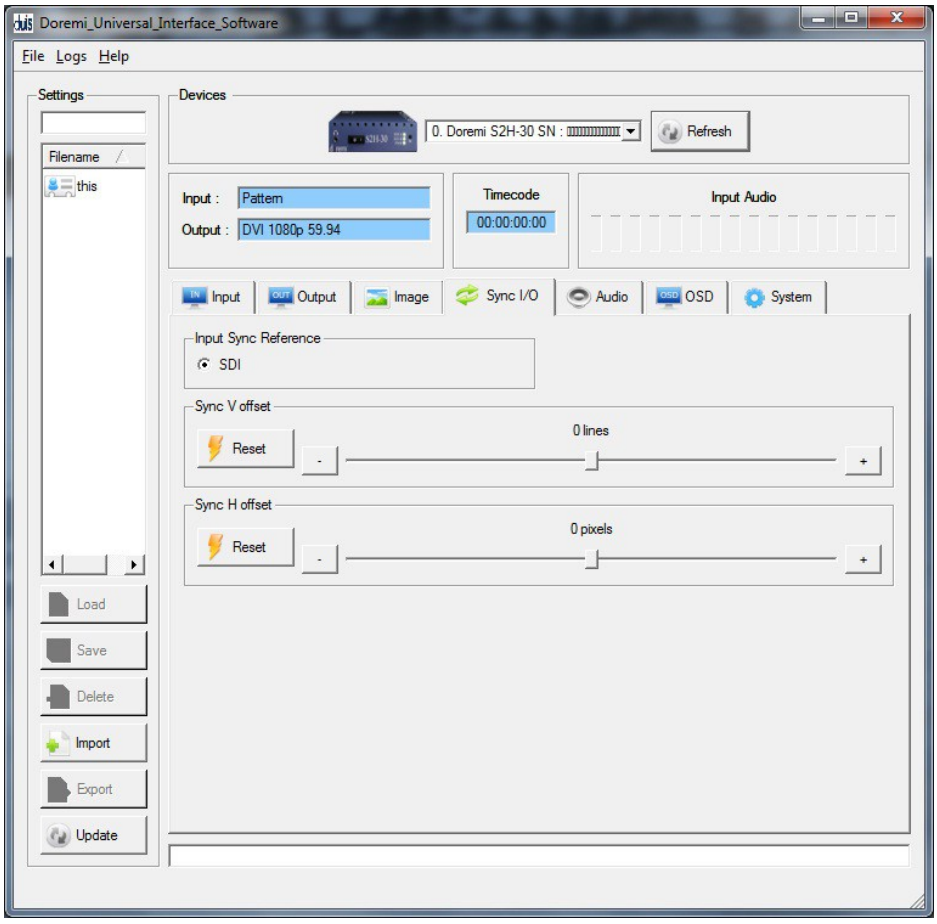


Figure 19: S2H-30 Control Panel Sync I/O Tab

All parameters are explained earlier in this manual in Section 3.4.

5.4.5 Audio Tab

The Audio tab is illustrated below in Figure 20.

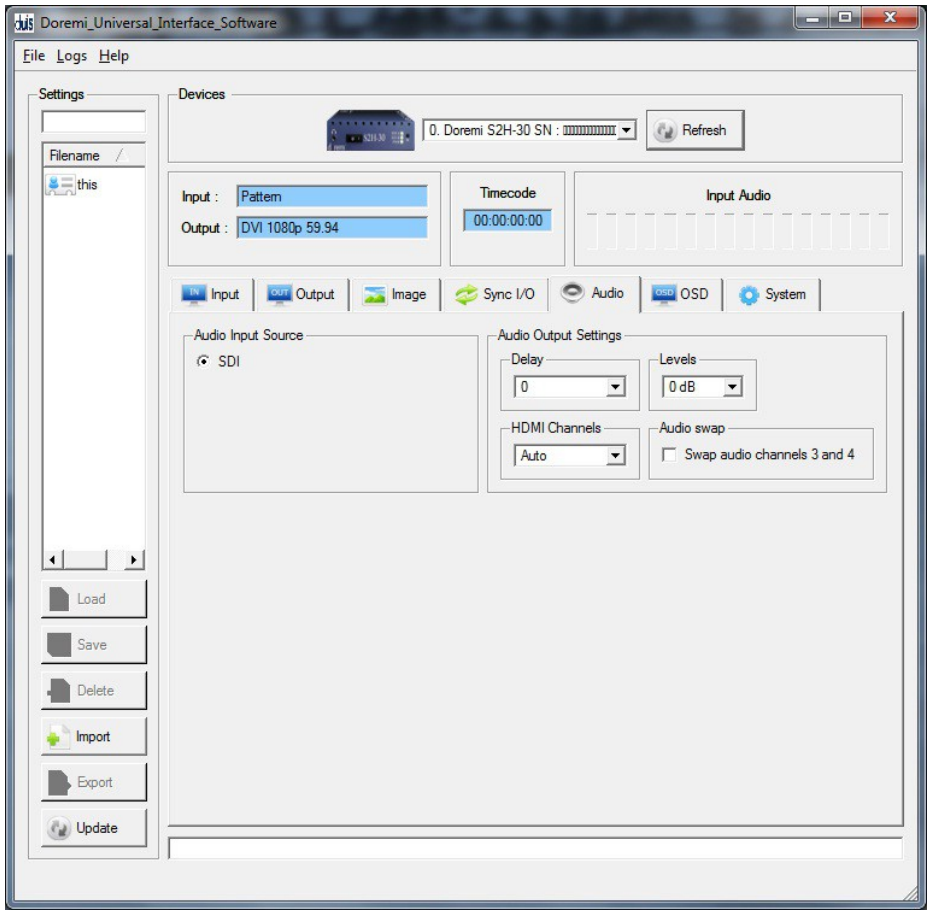


Figure 20: S2H-30 Control Panel Audio Tab

All parameters are explained earlier in this manual in Section 3.5.

5.4.6 OSD Tab

The OSD tab is illustrated below in Figure 21.

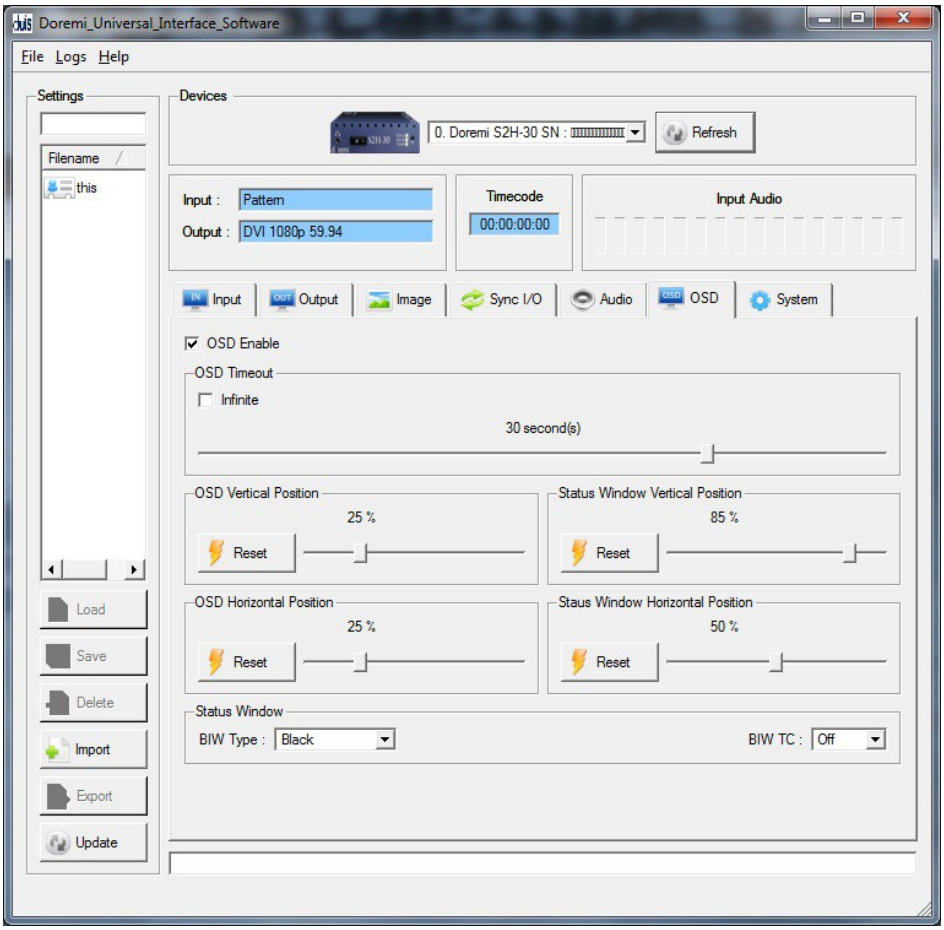


Figure 21: S2H-30 Control Panel OSD Tab

All parameters are explained earlier in this manual in Section 3.6.

5.4.7 System Tab

The System tab is illustrated below in Figure 22.

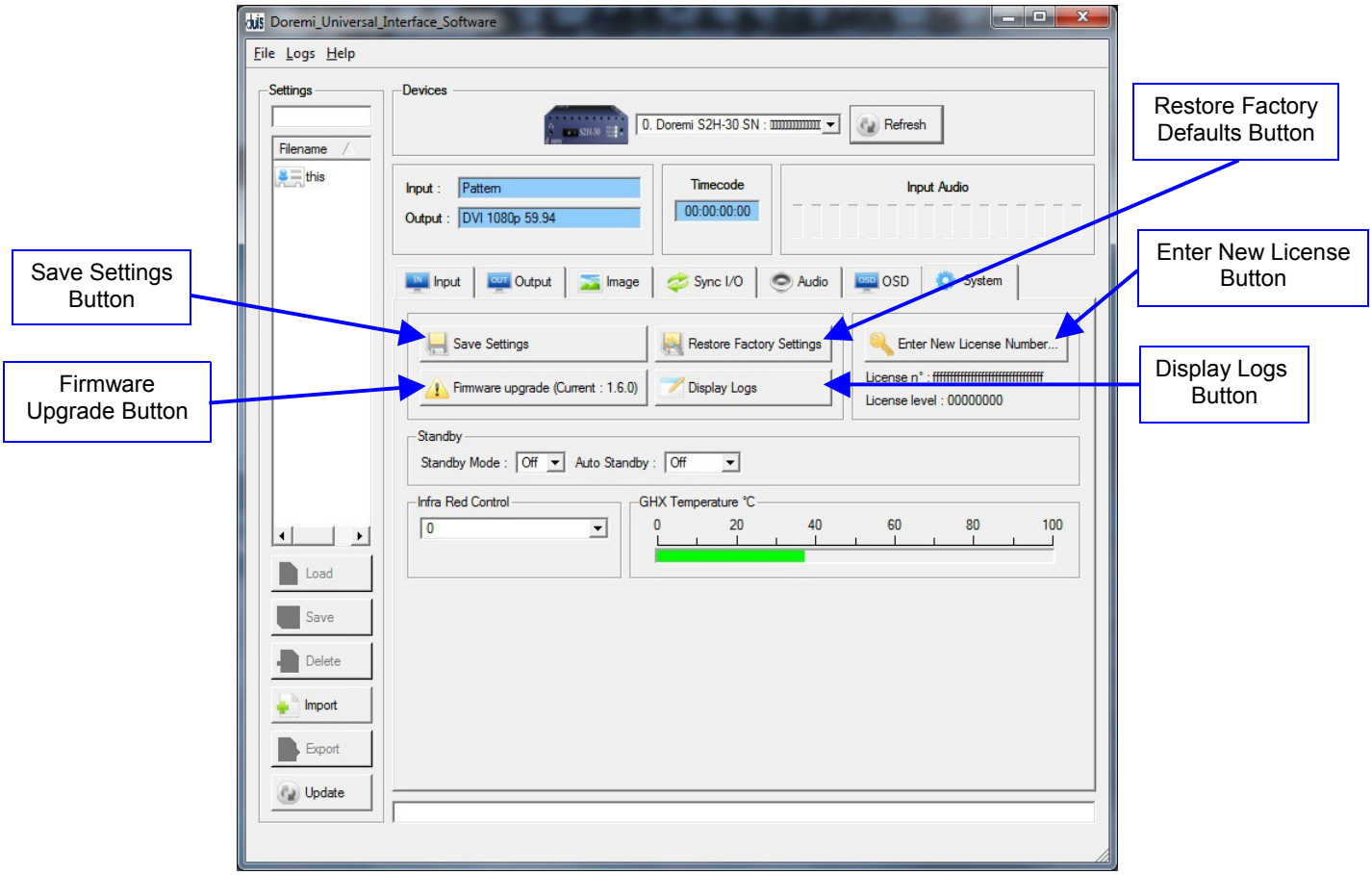


Figure 22: S2H-30 Control Panel System Tab

The parameters are explained earlier in this manual in Section 3.7.

- In addition, the System tab can be used to perform the following functions:
- To save the current settings to flash, click on the “Save Settings” button (see Figure 22).
- To restore the factory default settings, click on the “Restore Default Settings” button (see Figure 22).
- To enter a new license number, click on the “Enter New License Number ...” button and type the new license number in the pop-up window (see Figure 22).
- To perform a firmware upgrade, click on the “Firmware upgrade (Current: 1.6.0)” button – note that this button provides the current firmware version installed on the connected unit, after “Current: ”. See Section 6.1 for detailed upgrade steps to follow.
- To display the logs, click on the “Display Logs” button.

- A window containing the logs will appear:

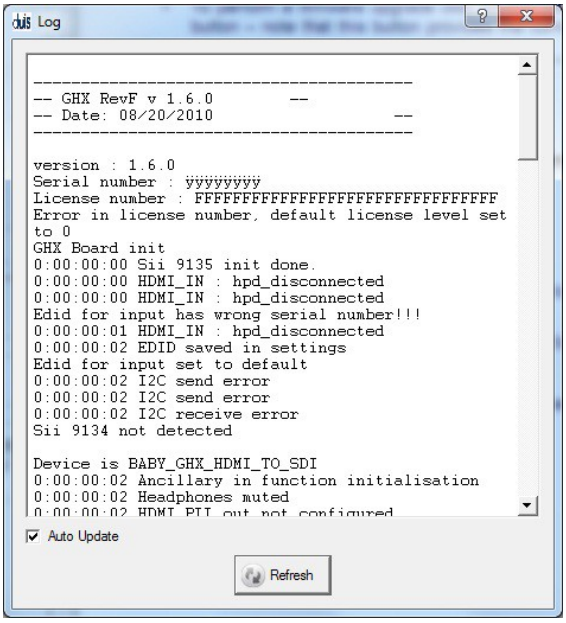


Figure 23: Log Window

- Select “Auto Update” from that window to see all messages (see Figure 23).

6 Firmware Update

The firmware can be updated through a USB using the DUIS. In case one of the files listed in the procedures below is missing, please contact Doremi Labs.

Note: The S2H-30, H2S-30, and GHX-10 all use the same firmware version, which is included with the DUIS software.

6.1 USB Update

The firmware can be updated through USB using the Doremi Universal Interface Software as presented in Section 5.4.7 .

To perform a update with a USB, follow the steps below:

- Connect the S2H-30 to the computer using the USB cable provided with the unit.
- Start the Doremi Universal Interface Software (see Section 5).
- Go to the “System” tab (see Section 5.4.7).
- Click on the “Firmware upgrade” button.
- Click the Browse button and select the firmware file (e.g: “ghx_1.6.0.bin”). Then click the “Upgrade now” button (see Figure 24).

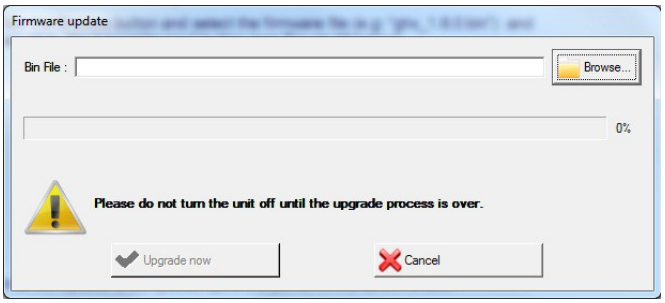


Figure 24: Firmware Update - Browse Window

- Once the update is completed, cycle the power of the S2H-30 unit.

7 Acronyms

Term	Definition
DUIS	Doremi Universal Interface Software
DVI	Digital Visual Interface
HDMI	High-Definition Multimedia Interface
HD-SDI	High-Definition Serial Digital Interface
IR	Infra Red
OSD	On Screen Display
PAR	Pixel Aspect Ratio
SDI	Serial Digital Interface
USB	Universal Serial Bus

8 Document Revision History

Date	Version	Description
02/10/2011	1.0	First version.
03/02/2011	1.1	New pictures added.
07/26/2012	1.2	Logo and contact information updated.
02/13/2013	1.3	Minor revisions made to document. Section 1 updated.